

THE ALABAMA DEPARTMENT OF EARLY CHILDHOOD EDUCATION

First Class Pre-K

Issue Brief 4, April 2017

School Readiness at Kindergarten Entry:

Differences between Students Who Participated in First Class Pre-K and Those Who Did Not, Fall 2016

Background

The mission of the Alabama Department of Early Childhood Education (DECE) is to provide state leadership that identifies, promotes, and coordinates services for children, their families, and communities. Housed within DECE, the Office of School Readiness administers Alabama's diverse delivery, voluntary, high quality Pre-K program. Classrooms are funded through a grant process in which sites must meet specific quality standards and abide by rigorous operating guidelines. Alabama's First Class Pre-K program has been awarded the highest quality rating by the National Institute for Early Education Research (NIEER) for the past 12 years.

Introduction

To support a consistent measurement and reporting system for school readiness, DECE led an initiative to expand school readiness assessments at the start of kindergarten. Following a pilot test conducted during the 2015-2016 school year, DECE partnered with the Alabama State Department of Education to expand voluntary Kindergarten Entry Assessment (KEA) during the 2016-2017 school year. DECE funded opportunities to participate throughout the state and provided training for kindergarten teachers in the use of the assessment tool. Teachers received incentives to participate, including professional development stipends, First Class Pre-K Conference admission, a personal technology device, and substitute teacher support to allow for release time to complete the assessment.

School readiness was assessed using Teaching Strategies GOLD®, an ongoing, teacher-rated, authentic observation-based, research-validated assessment system. Grounded in current research related to child development and learning, the Teaching Strategies GOLD® assessment includes 38 objectives across six domains of development (social-emotional, physical, language, cognitive, literacy, and math) that are associated with school success based on school readiness standards.¹⁻² Recent research supports the reliability and validity of using Teaching Strategies GOLD® at kindergarten entry to provide criterion-based information about school readiness.³ The purpose of this issue brief is to examine differences in school readiness at 2016-2017 kindergarten entry between children who participated in First Class Pre-K and those who did not.

Methods

All students in Alabama kindergarten classrooms whose teachers participated in the KEA project and who reached inter-rater reliability using the assessment tool were eligible for inclusion in analyses. Children who participated in First Class Pre-K the previous year were identified and considered cases. A control group was established from other children in the same classroom with First Class Pre-K cases, but who had not participated in First Class Pre-K. Kindergarten readiness for each developmental domain was determined using a standard score benchmark established by Teaching Strategies GOLD®. Readiness was coded as "emerging" (not met) and "accomplished" (met) per assessment specifications. A Chi-square test of independence was performed to assess the relationship between receipt of First Class Pre-K and school readiness at kindergarten entry.

Findings

For all domains of school readiness at kindergarten entry, children who participated in First Class Pre-K during the previous year accomplished/met expectations at higher percentages than did their peers who had not participated in First Class Pre-K. Percentages of children ready for kindergarten among the First Class Pre-K group ranged from 59.8% for math to 88.5% for literacy, while percentages meeting readiness expectations among the no-First Class Pre-K group ranged from 53.5% for math to 81.5% for literacy. The domains with the largest percentage point differences between groups were cognitive (12.4 percentage points) and language (12.2 percentage points). See Table 1.

Table 1. Comparison of School Readiness at Kindergarten between Children who Participated in First Class Pre-K and Children Who Did Not Participate in First Class Pre-K; Compared to Kindergarten Readiness Benchmarks; Teaching Strategies GOLD Kindergarten Entry Assessment; Fall 2016

School Readiness Domain	Sample Size		Percentage Meeting/Accomplishing Kindergarten Readiness Expectations*		Percentage Point Difference Between Groups	X ² (p-value)**
	Pre-K	No Pre-K	Pre-K	No Pre-K		
Social-emotional	681	2,232	81.3%	71.0%	10.3	28.8 (<0.001)
Physical	681	2,233	80.0%	73.4%	6.6	12.1 (0.001)
Language	681	2,231	72.8%	60.6%	12.2	33.9 (<0.001)
Cognitive	680	2,232	80.7%	68.3%	12.4	39.2 (<0.001)
Literacy	654	2,182	88.5%	81.5%	7.0	17.6 (<0.001)
Math	644	2,179	59.8%	53.5%	6.3	7.9 (0.005)

*Based on standard score readiness benchmarks provided in technical specifications for Teaching Strategies GOLD® assessment

** Based on Chi-square (X²) analyses; p-value indicates statistical significance of the difference; p-value of less than 0.05 is statistically significant

Implications

Children who participated in First Class Pre-K were more likely to be ready for kindergarten across all school readiness domains as compared to children who did not participate in First Class Pre-K. This is an important outcome given the known association between kindergarten readiness and later academic success.⁴ Findings are based on a sample of children in classrooms where teachers voluntarily participated in a Kindergarten Entry Assessment project. Initial results suggest that participation in First Class Pre-K increases school readiness at kindergarten entry, providing a strong foundation for future achievement and success in the classroom. As kindergarten entry assessment expands statewide, opportunities exist for broader understanding of school readiness and the impact of First Class Pre-K.

References:

1. Lambert RG, Kim DH, Taylor H, & McGee J. (2010). Technical manual for the Teaching Strategies GOLD® assessment system. Charlotte, NC: Center for Educational Measurement and Evaluation.
2. Lambert RG, Kim DH, & Burts DC (2015). The measurement properties of the Teaching Strategies GOLD® assessment system. Early Childhood Research Quarterly 33, 49-63.
3. Lambert RG, Kim DH, & Burts DC (2015). Using Teaching Strategies Gold® to assess kindergarten readiness and track growth and development. Charlotte, NC: Center for Educational Measurement and Evaluation.
4. Duncan GJ et al. (2007). School readiness and later achievement. Developmental Psychology 43(6), 1428-1446.